THE CLAIMS

1. (currently amended)   An electrophoresis device with a plurality of separation channels that can be separately loaded with samples, which are each connected with a sample channel, from which samples can be injected into the respective separation channel during exposure to an electrical field, wherein the sample channels are interconnected, thereby forming a shared injection channel that intersects the separation channels at crossing points, and whose ends have electrodes for generating the electrical field exposure, wherein the injection channel has plural exposed application areas, one area adjacent to each separation channel on a predetermined side of the respective crossing point, each said application area being designed and configured for taking samples by means of a micro-dispenser.

2. (previously presented) The electrophoresis device according to claim 1, in which the injection channel has channel expansions at said application areas.

3. (previously presented) The electrophoresis device according to claim 1, in which the injection channel for each separation channel has a molecule trap on the side of the respective crossing point lying opposite the respective application area.

4. (previously presented) The electrophoresis device according to claim 3, in which the molecule trap is a channel expansion, a semi-permeable membrane or a three-dimensional, porous structure.

5. (previously presented) The electrophoresis device according to claim 1, in which the separation channels and the injection channel are incorporated on a carrier chip, which is part of an electrophoresis chamber with buffer reservoirs each with one electrode.

6. (previously presented) The electrophoresis device according to claim 5, in which the carrier chip is designed for disposable use and can be detached from the electrophoresis chamber.

7. (currently amended) The electrophoresis device according to claim 1 wherein said electrophoresis ~~is part of~~ device is shaped and configured to be used with an analyzer, and which has at least one micro-dispenser to supply the sample on the application areas of the injection channels.

8. (currently amended) A ~~procedure~~ method for ~~using an~~ performing electrophoresis comprising providing the electrophoresis device according to claim 1, wherein the sample channels are loaded with samples by means of a micro-dispenser, and the samples are introduced into the injection channel near the crossing point between the injection channel and one respective separation channel for purposes of sample separation, and transferred into the separation channel by exposing the injection channel to an electrical field, with electrophoretic separation taking place in this separation channel.

9. (currently amended) The ~~procedure~~ method according to claim 8, in which the samples are electrically concentrated prior to separation at predetermined zones at the beginning of the separation channel.

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